



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/704,244	11/02/2000	Jerome M. Gauthier	Sloan B-344	2637
26568	7590	08/03/2004	EXAMINER	
COOK, ALEX, MCFARRON, MANZO, CUMMINGS & MEHLER LTD SUITE 2850 200 WEST ADAMS STREET CHICAGO, IL 60606			NGUYEN, NAM V	
			ART UNIT	PAPER NUMBER
			2635	12
DATE MAILED: 08/03/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/704,244	GAUTHIER ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Nam V Nguyen	2635	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 22 April 2004.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-21 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date: _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date: _____  | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

This communication is in response to applicant's Request for Continued Examination which is filed April 22, 2004 in the application of Gauthier et al. for a "system for remote operation of a personal hygiene or sanitary appliance" filed November 2, 2000.

Claims 1-21 are pending.

### ***Response to Arguments***

Based upon the facts established by the accompany of supplemental declaration under 37 C.F.R. 1.131, filed April 22, 2004, the examiner has withdrawn the rejection of claims 1-21 where the cited prior art reference to Okamoto et al. (US# 6,522,078) was used.

### ***Claim Objections***

Claim 14 is objected to because of the following informalities: The use of a "." in plural instances should be avoided. Therefore "appliance." should be "appliance,". Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

Art Unit: 2635

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 14-21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 14, the phrase "means, remote from and associated with a specific appliance, for signaling an intent to cause operation of that appliance, a remote radio transmitter connected to each means for signaling an intent, each remote radio transmitter being programmed to transmit a message unique to its specific appliance" is confusing and unclear. It is not understood what is meant by such a limitation. Is there only one means and a remote radio transmitter or a plurality of means and remote radio transmitters? Is each of the means having a remote radio transmitter? Where is this limitation supported by specification? (see Specification page 8 to 9; Figure 2).

Referring to claims 15-21 are rejected as being dependent upon a rejected Claim 14 above.

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Laverty, Jr. et al. (US# 5,769,120) in view of Garvey et al. (US# 6,286,764).

Referring to claim 1, Laverty, Jr. et al. disclose a system for remote operation of a personal hygiene appliance which is one of a toilet flush valve, a urinal flush valve, a faucet, a shower head, a soap dispenser, a hand dryer, and a paper towel dispenser (appliance) (i.e. liquid supply fixtures) (column 1 line 59 to column 2 line 4; see Figure 13), said system (i.e. a control system) including the appliance (i.e. a liquid supply fixture), an electric operator (SFV) (i.e. a solenoid flush valve combination) for controlling operation of said appliance (i.e. a liquid supply fixture), an appliance radio receiver (R) (i.e. receiver for receiving command signal from a remote control unit) connected electrically to said operator (UI) (i.e. a microprocessor) to provide an activating signal thereto, an appliance radio transmitter (i.e. transmitter for transmitting transmitted signal) connected to said appliance radio receiver (R) (column 4 line 27 to column 6 line 60; see Figures 1-13),

means (i.e. a remote control unit) remote from said appliance (i.e. a liquid supply fixture), for signaling an intent to cause operation of said appliance (i.e. a liquid supply fixture), a remote radio transmitter connected to said means for signaling an intent and operable thereby (column 127 line 46 to column 128 line 4; see Figure 13);

Said remote radio transmitter (i.e. a transmitter of a remote control unit) being programmed to transmit a message unique to said means for signaling an intent (intent message), upon being activated by said means (i.e. input signal from a remote control unit) for signaling an intent, said appliance receiver (R) (i.e. receiver) being programmed to receive said intent

Art Unit: 2635

message and upon receipt thereof to cause operation of said electric operator (SFV) (i.e. a solenoid flush valve combination) (column 127 line 46 to column 128 line 4; see Figure 13).

However, Laverty, Jr. et al. did not explicitly disclose an indicator located at said means for signaling an intent, a remote radio receiver connected to said indicator to provide an operating signal therefor, and

Said appliance transmitter to send a message unique to said appliance (acknowledge message) to said remote receiver to acknowledge receipt of said intent message, said remote receiver, upon receipt of said acknowledge message, causing activation of said indicator.

In the same field of endeavor of remote control of fluid delivery system, Garvey et al. teach that an indicator (64) (i.e. a display) located at said means (62) (i.e. a user input device) for signaling an intent, a remote radio receiver (not shown) connected to said indicator (64) to provide an operating signal therefor (column 9 line 50 to column 10 line 26; column 12 lines 60 to 67; see Figure 1), and

Said appliance transmitter (34) (i.e. a control unit) to send a message unique to said appliance (acknowledge message) (i.e. status signal) to said remote receiver to acknowledge receipt of said intent message, said remote receiver, upon receipt of said acknowledge message, causing activation of said indicator (64) (i.e. display) (column 11 lines 16 to 34; column 12 lines 12 to 16; column 15 lines 25 to 65; see Figure 5) in order to facilitate user monitoring of input selection and system status.

One of ordinary skilled in the art recognizes the need to have a remote user interface to receive status information to display from a supply system of Garvey et al. in the remote control unit of a liquid supply fixture of Laverty, Jr. et al. because Laverty, Jr. et al. suggest it is desired

Art Unit: 2635

to provide that a control system for a liquid supply fixture response to signals (column 127 lines 46 to column 128 line 4) and Garvey et al. disclose that a control unit transmits signal to the remote user interface to display the status information of a control unit (column 15 lines 25 to 65) in order to monitor the status of the fluid supply system. Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to add a remote user interface to receive status information to display from a supply system of Garvey et al. in the remote control unit of a liquid supply fixture of Laverty, Jr. et al. with the motivation for doing so would have been to provide a wireless remote control of a liquid supply fixture with a status information display in order for the user to monitor the status remotely.

Referring to Claim 2, Laverty, Jr. et al. in view of Garvey et al. disclose the system of Claim 1, Laverty, Jr. et al. disclose wherein said means (i.e. a remote control unit) for signaling an intent includes an infrared sensor (column 1 lines 59 to 64; column 2 lines 51 to 58; see Figure 1).

Referring to Claim 3, Laverty, Jr. et al. in view of Garvey et al. disclose the system of Claim 1, Garvey et al. disclose wherein said means (60) (i.e. a remote user interface) for signaling an intent includes a manually activated switch (62) (i.e. a user input key pad) (column 9 lines 50 to 62; see Figure 1).

Referring to Claim 4, Laverty, Jr. et al. in view of Garvey et al. disclose the system of Claim 1, Laverty, Jr. et al. disclose wherein said means for signaling an intent include an infrared

Art Unit: 2635

sensor (column 1 lines 59 to 64; column 2 lines 51 to 58; see Figure 1) and Garvey et al. disclose manually activated switch (62) (i.e. a user input key pad) (column 9 lines 50 to 62; see Figure 1).

Referring to Claim 5, Laverty, Jr. et al. in view of Garvey et al. disclose the system of Claim 1, Laverty, Jr. et al. disclose wherein said appliance (i.e. a liquid supply fixture) is a flush valve connected to operate a urinal (column 127 lines 46 to 56).

Referring to Claim 6, Laverty, Jr. et al. in view of Garvey et al. disclose the system of Claim 1, Laverty, Jr. et al. disclose wherein said appliance is a flush valve connected to operate a water closet (column 127 lines 46 to 56).

Referring to Claim 7, Laverty, Jr. et al. in view of Garvey et al. disclose the system of Claim 1, Laverty, Jr. et al. disclose wherein said appliance is a faucet (column 3 lines 39 to 57; see Figure 1).

Referring to Claim 8, Laverty, Jr. et al. in view of Garvey et al. disclose the system of Claim 1, Garvey et al. disclose wherein said appliance is a soap dispenser (column 1 line 12 to 26).

Referring to Claim 9, Laverty, Jr. et al. in view of Garvey et al. disclose the system of Claim 1, Garvey et al. disclose wherein said appliance is a shower head (37) (column 5 lines 13 to 28; column 6 lines 45 to 56; see Figure 1).

Referring to Claim 10, Laverty, Jr. et al. in view of Garvey et al. disclose the system of Claim 1, Garvey et al. disclose wherein said appliance is a paper tower dispenser (column 1 line 12 to 26).

Referring to Claim 11, Laverty, Jr. et al. in view of Garvey et al. disclose the system of Claim 1, Garvey et al. disclose wherein said appliance is a hand dryer (column 1 line 12 to 26).

Referring to Claim 12, Laverty, Jr. et al. in view of Garvey et al. disclose the system of Claim 1, Laverty, Jr. et al. disclose wherein said indicator (64) is a light emitting diode (column 3 lines 50 to 57; column 6 lines 61 to 67).

***Allowable Subject Matter***

Claim 13 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Referring to claim 13, the following is an examiner's statement of reasons for allowance: The prior art of record fails to disclose or suggest wherein said intent message includes an address unique to a specific appliance, and said acknowledge message includes an address unique to a specific appliance, but differing from the address of said intent message.

Claims 14-21 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Referring to claim 14, the following is an examiner's statement of reasons for allowance: The prior art of record fails to disclose or suggest that a central processing unit (CPU) having a microprocessor, a radio receiver and a radio transmitter connected thereto, the CPU radio receiver being capable of receiving intent messages from all remote radio transmitters and the CPU radio transmitter being capable of sending messages (operate messages) to all appliance radio receivers, the microprocessor being programmed upon receipt of an intent message from a specific transmitter, unique to that transmitter's associated appliance, of causing the CPU transmitter to send an operating message, unique to the receiver associated with that appliance for causing operation of its electric operator

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Reed (US# 5,170,361) disclose a fluid temperature, flow rate, and volume control system.

Eichholz et al. (US# 5,588,636) disclose a water fixture control system.

Pinchott et al. (US# 5,813,655) disclose a remote control on/off valve.

Symonds et al. (US# 6,283,139) disclose a remote controlled hose valve.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nam V Nguyen whose telephone number is 703-305-3867. The examiner can normally be reached on Mon-Fri, 8:00AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Horabik can be reached on 703-305-4704. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

Nam Nguyen  
July 22, 2004



MICHAEL HORABIK  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600

